

The Challenge of Admitting Electronic Evidence in Civil Procedure Law

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Abstract

In the digital age, the use of electronic evidence in civil disputes has become increasingly common. However, judges often face significant challenges in accepting and evaluating electronic evidence due to concerns about its authenticity, integrity, and relevance. This paper examines the factors contributing to judicial doubts regarding electronic evidence in Indonesian civil litigation and explores the implications of such doubts on the resolution of legal disputes. Drawing on case law, legal theory, and practical challenges, the paper identifies key issues such as the ease of manipulation, lack of standardized procedures for collecting and preserving digital evidence, and the limited understanding of technology among many judges. These factors create a significant barrier to the effective use of electronic evidence in court, leading to delays, case dismissals, or unjust outcomes. The paper also discusses potential solutions to overcome these challenges, including the need for clearer legal frameworks, the role of forensic digital experts, and judicial education in information technology. By addressing these concerns, this paper aims to highlight the critical importance of building trust in electronic evidence, ensuring its proper use in civil dispute resolution, and promoting a more efficient and fair legal process. Ultimately, the study proposes strategies to strengthen the role of electronic evidence in Indonesian civil law while maintaining judicial integrity and ensuring the protection of all parties involved.

Keywords: Civil Procedure; Challenge of Admitting; Electronic Evidence.

1. INTRODUCTION

The rapid advancement of information and communication technology (ICT) has profoundly altered the way individuals and businesses interact, conduct transactions, and store data¹. In civil law disputes, this transformation has led to a growing dependence on electronic evidence, encompassing emails, chat transcripts, CCTV footage, server logs, blockchain transaction records, and other forms of digital documentation. Even now, land certificates have been converted into electronic form to simplify the process and keep up with the times². The rise of such evidence reflects not only the modernization of commercial practices but also the evolving evidentiary landscape in Indonesian civil litigation. As

¹ Ismail, Dian Ekawaty, et al. "Cyber Harassment of Public Figures: Causes and Importance of Legal Education." *E3S Web of Conferences*. Vol. 594. EDP Sciences, 2024.

² Rosmidah et al., "Can Electronic Land Rights Registration Help Prevent Land from Mafia Practices?," *Jambe Law Journal* 7, no. 2 (2024): 539–58, <https://doi.org/10.22437/home.v7i2.375>.

society transitions toward a digital economy, courts are increasingly confronted with the necessity to assess and determine the probative value of electronic evidence³.

The proliferation of e-commerce, online banking, and digital communications has rendered electronic evidence indispensable in resolving a variety of civil disputes, ranging from contractual claims to intellectual property cases⁴. Legislatively, the Indonesian legal system has recognized this reality through the enactment of the Electronic Information and Transactions Law (Law No. 11 of 2008 as amended by Law No. 19 of 2016 and Law No. 1 of 2024, hereinafter "ITE Law"), which explicitly equates electronic documents with written evidence⁵. Nevertheless, despite this formal acknowledgment, judicial practice demonstrates that the acceptance of electronic evidence remains inconsistent. This disparity between legislative intent and courtroom application creates uncertainty for litigants who rely on such evidence to prove their claims or defenses.⁶

This inconsistency in the acceptance of electronic evidence can be seen in Decision Number 31/Pdt.Sus-Hak Cipta/2020/PN Niaga. Jkt Pst, concerning the artwork Love Light, both the plaintiff and the defendant used electronic evidence in the form of photographs. In its legal considerations, the panel of judges accepted the electronic evidence in the form of photographs submitted by the plaintiff on the grounds that it was relevant to the subject matter of the case, while the electronic evidence from the defendant was disregarded, even though it had also been examined by the same panel of judges.⁷

In Decision Number 10/Pdt.G/2021/PN.Tbk, there was also inconsistency in the treatment of electronic evidence, in which electronic evidence such as photographs and videos were used as evidence in this case. However, in the panel of judges' legal considerations, it was stated that although photographs are not evidence as regulated in Article 164 HIR/284 RBg, they can be considered as presumptive evidence, which implies the acceptance of electronic evidence in the form of photographs. The video evidence in mp4 format was disregarded by the judge on the grounds that it did not include a forensic report and chain of custody, so the video was disregarded.⁸

The reluctance of judges to admit electronic evidence in civil proceedings remains a pressing concern. Such hesitancy often arises from doubts regarding the authenticity, integrity, and reliability of digital data. The perception that electronic records are

³ Pradipa, Arya. "Analisis terhadap Kedudukan Alat Bukti Elektronik dalam Pembuktian Perkara Perdata Pasca UU ITE dan Perkembangan E-Court." *Konsensus: Jurnal Ilmu Pertahanan, Hukum dan Ilmu Komunikasi* 2, no. 3 (2025): 203-191. Furthermore, it is emphasized that the challenges in assessing electronic evidence in civil disputes include concerns about its authenticity, integrity, and relevance. Judges may struggle with verifying the reliability of digital evidence due to its vulnerability to manipulation. Additionally, the lack of standardized procedures for collecting and preserving digital evidence and limited technological understanding among many judges hinder effective evaluation and use in court. See Sujatmiko, Bambang, and Bambang Soesatyo. "The Urgency of Using Electronic Evidence in Trials as an Effort to Answer the Challenges of Law Enforcement in the Digital Era and Social Media Dynamics." *Asian Journal of Social and Humanities* 3, no. 9 (2025): 1604-1613; Kurniawan, M. Beni. "Implementation of electronic trial (e-litigation) on the civil cases in Indonesia court as a legal renewal of civil procedural law." *Jurnal Hukum dan Peradilan* 9, no. 1 (2020): 43-70; Latifiani, Dian, et al. "Reconstruction of E-Court Legal Culture in Civil Law Enforcement." *Journal of Indonesian Legal Studies* 7, no. 2 (2022): 441-448; Pratiwi, Sahira Jati, Steven Steven, and Adinda Destaloka Putri Permatasari. "The Application of E-Court as an Effort to Modernize the Justice Administration in Indonesia: Challenges & Problems." *Indonesian Journal of Advocacy and Legal Services* 2, no. 1 (2020): 39-56.

⁴ Hamzah, Rosyidi, et al. "Imperfect Information of Bankers Clause in Credit Agreements in Banking Institutions: Further Legal Impact." *Lex Scientia Law Review* 7, no. 2 (2023): 529-568.

⁵ Asimah, Dewi. "Menjawab Kendala Pembuktian Dalam Penerapan Alat Bukti Elektronik: To Overcome the Constraints of Proof in the Application of Electronic Evidence." *Jurnal Hukum PERATUN* 3, no. 2 (2020): 97-110.

⁶ Nurfauzah Maulidiyah and Yustria Novi Satriana, "Eksistensi Digital Evidence Dalam Hukum Acara Perdata," *Jurnal Cakrawala Hukum* 10, no. 1 (2019), <https://doi.org/10.26905/idjch.v10i1.2616>.

⁷ Putusan Nomor 31/Pdt.Sus-Hak Cipta/2020/PN. Niaga, Jkt.Pst (2020).

⁸ Putusan Nomor: 10/Pdt.G/2021/PN.Tbk (2021).

susceptible to alteration, fabrication, or deletion fuels judicial caution⁹. Compounding this problem is the fact that the principal source of civil procedural law the Civil Procedure Code (*Herzien Inlandsch Reglement*/HIR, and *Rechtsreglement voor de Buitengewesten*/RBg) was formulated in the early twentieth century, long before the digital era, and therefore contains no provisions directly addressing the treatment of electronic evidence¹⁰.

One of the most significant legal gaps lies in the absence of comprehensive procedural guidelines for the admission of electronic evidence in civil disputes. While the ITE Law affirms the legal force of electronic documents, it fails to set out detailed rules on their authentication, chain of custody, or technical admissibility. In contrast to criminal proceedings, where certain digital forensic protocols have been gradually integrated, civil procedure continues to be governed by traditional evidentiary provisions under Article 164 HIR and Article 1866 of the Civil Code. This procedural vacuum leaves judges without a uniform framework to assess the admissibility and probative value of electronic materials¹¹.

A further legal gap arises from the lack of harmonization between substantive and procedural norms. Although the ITE Law provides substantive recognition of electronic documents, this acknowledgment is not systematically incorporated into the Civil Procedure Code or Supreme Court procedural regulations (*Peraturan Mahkamah Agung*, PERMA). Consequently, judges are compelled to interpret admissibility criteria on an ad hoc basis, resulting in divergent decisions. In some instances, courts have accepted screenshots of instant messaging conversations as valid proof; in others, similar evidence has been rejected for want of verifiable authenticity. This inconsistency undermines predictability in the adjudication process and erodes trust in the judiciary's ability to handle technologically complex disputes¹².

The challenges are further exacerbated by limited technological literacy among segments of the judiciary. Many judges, particularly in smaller jurisdictions, may lack familiarity with digital forensic methodologies, metadata analysis, or cryptographic verification techniques such as hash values. This knowledge gap often leads to an over-reliance on conventional forms of evidence and a preference for excluding electronic materials rather than engaging in technically complex authentication processes. The absence of specialized training in information technology within judicial education programs perpetuates this barrier and impedes the effective integration of electronic evidence into civil proceedings¹³.

The contemporary discourse on the admissibility of electronic evidence in civil and arbitral proceedings has been significantly shaped by the works of Tran¹⁴, whose contributions in the *European Yearbook of International Economic Law* systematically

⁹ Wahyudi, Johan. "Dokumen Elektronik Sebagai Alat Bukti Pada Pembuktian di Pengadilan." *Perspektif* 17.2 126-118 : (2012).

¹⁰ Fakhriah, Efa Laela. *Bukti Elektronik dalam Sistem Pembuktian Perdata*. (Bandung: Alumni, 2023).

¹¹ Harahap, M. Yahya. *Hukum Acara Perdata: Tentang Gugatan, Persidangan, Penyitaan, Pembuktian, dan Putusan Pengadilan*. (Jakarta: Sinar Grafika, 2017).

¹² Tamin, Budianto Eldist Daud. "Tinjauan Yuridis Terhadap Kedudukan Peraturan Mahkamah Agung (Perma) dalam Hierarki Peraturan Perundang-Undangan di Indonesia." *Lex Administratum* 6, no. 3 (2018).

¹³ Anggraeni, Ricca. "Jaringan Dokumentasi dan Informasi Hukum dan Tantangan Literasi Digital: Strategi Optimalisasi Untuk Pembangunan Hukum Nasional." *Majalah Hukum Nasional* 54, no. 2 (2024): 237-258; Syarifuddin, Syarifuddin, et al. "Reformasi Hukum di Era Digital: Tantangan dan Peluang di Indonesia." *Indonesian Research Journal on Education* 4, no. 4 (2024): 3206-3215; Sukmaningsih, Dewi. "Role of Documentation and Legal Information Network (JDIH) Efforts in Fulfillment of Human Rights." *Jurnal Daulat Hukum* 1, no. 2 (2018): 371-376.

¹⁴ Tran, Quynh Anh. "The Admission of Electronic Evidence in Civil and Arbitral Proceedings." *Electronic Evidence in Civil and Commercial Dispute Resolution: A Comparative Perspective of UNCITRAL, the European Union, Germany and Vietnam*. (Cham: Springer Nature Switzerland, 2022), pp. 211-231.

address the conceptual, procedural, and jurisdictional challenges inherent in integrating digital materials into formal adjudication. Tran's analysis of both civil and commercial dispute resolution settings underlines that while electronic evidence—ranging from emails to digital contracts—has been granted legal recognition in many jurisdictions, its procedural assimilation remains uneven. The author stresses that, beyond formal acknowledgment in substantive law, the absence of harmonized procedural rules frequently results in judicial reluctance or inconsistency in evidentiary assessment. This thematic focus directly informs the present research, which aims to examine similar inconsistencies within the Indonesian legal framework.

Building upon this foundational perspective, Tran further explores the legal sources of UNCITRAL, the European Union, Germany, and Vietnam, revealing how jurisdictional variations create divergent evidentiary thresholds and authentication standards. The comparative insights offered in this work demonstrate that even in advanced legal systems, the absence of uniform standards for chain of custody, metadata verification, and expert testimony leads to fragmentation in evidentiary acceptance. Such findings are directly relevant to Indonesia's situation, where the Civil Procedure Code remains silent on digital authentication protocols, thereby compelling judges to rely on discretionary interpretation. This comparative approach not only frames the international dimension of the issue but also highlights the methodological gaps in domestic law.

In a related thread, Tran's delineation of the significant types of electronic evidence provides a taxonomy that includes not only textual and transactional data but also multimedia, geospatial, and blockchain-derived materials. This expanded categorization is critical because it underscores the growing complexity of the evidentiary landscape, where each category demands distinct technical validation methods. The Indonesian judiciary, which often lacks standardized technical guidelines, may struggle to accommodate such diversity without comprehensive procedural reforms. By identifying the multifaceted nature of electronic evidence, this body of literature supports the proposition that evidentiary law must evolve to address the technical particularities of each data type.

The technical challenges of securing evidentiary integrity have also been addressed by Lone and Mir¹⁵ through their proposal of a blockchain-based digital forensics chain of custody using Hyperledger Composer. Their work demonstrates how distributed ledger technology can provide immutable verification of evidentiary handling, thereby reducing disputes over authenticity. While such technological solutions have seen experimental adoption in certain international contexts, Indonesia has yet to institutionalize comparable mechanisms, creating a gap between technological possibilities and judicial readiness. This disconnect highlights the innovation potential in integrating secure digital forensics frameworks into domestic civil procedure.

Amann, Dillon, and Quirchmayr¹⁶ examine the operational difficulties in managing the lifecycle of advanced electronic evidence within international court environments, noting that the cross-jurisdictional handling of such materials raises issues of compatibility, data preservation, and evidentiary transfer. These concerns are equally salient in domestic contexts where inter-agency coordination is limited and where courts may lack the infrastructure to securely store and retrieve digital evidence over extended

¹⁵ Lone, Auqib Hamid, and Roohie Naaz Mir. "Forensic-chain: Blockchain based digital forensics chain of custody with PoC in Hyperledger Composer." *Digital Investigation* 55-44 : (2019) 28.

¹⁶ Amann, Philipp, Mark P. Dillon, and Gerald Quirchmayr. "Challenges to Advanced Electronic Evidence Lifecycle Management in an International Court Environment." *International Conference on Advances in Information Technology*. Berlin, Heidelberg: Springer Berlin Heidelberg, 2012.

proceedings. Their findings suggest that without systemic infrastructural upgrades, even well-drafted procedural reforms may falter in practical application a point particularly relevant to Indonesia's decentralized judicial system.

The thematic scope of electronic evidence has also been broadened by works such as Roedl, Elmes, and Conley¹⁷, who explore the role of geospatial technologies in forensic contexts, and Lekala¹⁸, who considers the admissibility of email communications in provisional sentence summons. These studies illustrate that electronic evidence is not confined to commercial contracts or financial records but extends into specialized data domains that require technical literacy for proper judicial evaluation. This reinforces the argument that judicial training programs must encompass emerging data forms, an area where Indonesian practice remains underdeveloped.

Comparative legal development is further illustrated by Nguyen¹⁹, whose study on improving Vietnam's electronic evidence law draws from China's experience during the Industry 4.0 era. Nguyen's work demonstrates that systematic reform, including procedural codification and judicial capacity-building, can significantly enhance evidentiary reliability and judicial efficiency. The Vietnamese example underscores that reform is most effective when procedural law explicitly integrates technological realities, an approach that could serve as a model for Indonesian reform efforts.

Nowak²⁰ provides an in-depth examination of electronic documents in civil proceedings, emphasizing the tension between evidentiary flexibility and procedural safeguards. Nowak's observations that courts must balance openness to new forms of proof with protections against manipulation resonate strongly with Indonesia's current legal dilemmas. This balance—between technological adaptability and procedural rigor—represents a critical axis of the present research, which seeks to develop recommendations that bridge statutory recognition with enforceable procedural mechanisms. Together, this body of literature affirms that while the recognition of electronic evidence is a global trend, the pathways to its effective judicial integration are diverse, context-dependent, and, in Indonesia's case, still in formative stages.

A particular issue in this study is the rejection of electronic evidence in civil cases. From several decisions presented, some court decisions explicitly rejected the use of electronic evidence in civil case settlements for two main reasons: the electronic evidence used by the parties had not undergone digital forensic testing, and there was no expert testimony explaining the status of the electronic evidence itself.

The digital forensic examination referred to in several court decisions does not clearly explain which party the principals should approach to conduct a forensic examination of electronic evidence, whether the electronic evidence must undergo a digital forensic examination before the lawsuit is filed or whether the digital forensic examination should be conducted while the lawsuit is ongoing. This has caused the principals to be unclear about the legal manner in which to use electronic evidence in the settlement of civil disputes.

Meanwhile, Law No. 1 of 2024 concerning the Second Amendment to Law No. 11 of 2008 concerning Electronic Information and Transactions explicitly states that if

¹⁷ Elmes, Gregory A., George Roedl, and Jamison Conley, eds. *Forensic GIS: the role of geospatial technologies for investigating crime and providing evidence*. Vol. 11. Dordrecht: Springer, 2014.

¹⁸ Lekala, Adv R. "E-mail communication for provisional sentence summons." *Journal of International Commercial Law and Technology* 6, no. 3 (2011): 145-151.

¹⁹ Nguyen, Bich Thao. "Improving Vietnam's Electronic Evidence Law in the Industry 4.0 Era: Experience from China." *Revista de Direito* 16, no. 1 (2024): 01-21.

²⁰ Nowak, Mariusz. "Electronic Evidence in Civil Proceedings on the Background of Comparative Law." *Studia Iuridica Lublinensia* 33, no. 2 (2024): 223-237.

electronic information and/or electronic documents and/or their printouts originate from a registered electronic system operator, they can be used as evidence. However, in practice, the panel of judges did not pay attention to the provisions of Article 5 of the aforementioned law, but instead requested that a digital forensic test be carried out and supplemented with expert testimony, which resulted in legal uncertainty regarding the use of electronic evidence in the settlement of civil cases in practice because the judges were reluctant to accept it.

This study utilises a normative research method that employs secondary data. Secondary data consists of primary, secondary and tertiary legal materials.²¹ The primary legal materials in this study are legislation and jurisprudence, while secondary legal materials consist of books and journals relevant to this study.²² The analysis technique used is descriptive analysis. This study explains that there are still civil court decisions that reject the use of electronic evidence.

2. ANALYSIS AND DISCUSSION

2.1. The Vagueness of Regulation in Admitting Electronic Evidence in Civil Procedure Law

Vagueness contributing to admitting electronic evidence is the issue of authentication and integrity²³. Unlike traditional documentary evidence, which can be verified through physical examination, electronic evidence is inherently vulnerable to alteration, duplication, or deletion without leaving obvious traces²⁴. The absence of standardized technical safeguards, such as cryptographic hash verification or time-stamping mechanisms, makes it difficult for courts to determine whether the data presented is the same as originally collected. In many cases, parties fail to provide expert testimony or forensic reports that can confirm the authenticity of the evidence, further weakening its admissibility. This problem is compounded by the limited integration of digital forensic standards in Indonesian civil litigation practice, leaving judges with insufficient grounds to be confident in the integrity of the material before them.²⁵

The existing procedural codes, namely the *Herziene Indonesisch Reglement* (HIR) and *Rechtsreglement Buitengewesten* (RBg), were drafted in the colonial era and remain largely focused on physical, written, and testimonial evidence. They contain no explicit provisions on how electronic evidence should be collected, stored, or presented in court. Although the Electronic Information and Transactions Law (ITE Law) provides a legal basis for recognizing electronic documents, it does not harmonize with the procedural rules in civil litigation,²⁶ creating uncertainty for both practitioners and judges. This legal vacuum forces judges to exercise broad discretionary power, often leading to inconsistent outcomes in similar cases.

²¹ M. Syamsudin, *Mahir Meneliti Permasalahan Hukum*, Yogyakarta: Kencana, 2021, p. 92-93

²² H. Zainudin Ali, *Metode Penelitian Hukum*, Jakarta: Sinar Grafika, 2017, p. 12

²³ Socialista, Tembang Merah Sunny, Arsella Imanda Putri, and Dadang Fernando. "Keabsahan Sertipikat Hak Tanggungan Elektronik dalam Prospek Pejabat Pembuat Akta Tanah." *Law, Development and Justice Review* 8, no. 1 36-20 :(2025).

²⁴ Arshad, Humaira, Aman Bin Jantan, and Oludare Isaac Abiodun. "Digital forensics: Review of issues in scientific validation of digital evidence." *Journal of Information Processing Systems* 14, no. 2018) 2).

²⁵ Howard, Maureen A., and Jeffry C. Barnum. "Bringing Demonstrative Evidence in from the Cold: The Academy's Role in Developing Model Rules." *Temple Law Review* 513 :(2016) 88.

²⁶ Permana, Wahyu Priyanka Nata. "Reviewing Information and Electronic Transaction Act from a Convention on Cybercrime of 2001." *Jurnal Hukum Novelty* 12, no. 2021) 2).

The absence of a harmonized legal framework also means that courts do not have a uniform set of evidentiary thresholds for electronic documents. In some instances, a printed screenshot of an email may be accepted without objection, while in other cases, similar evidence is rejected for lack of technical verification.²⁷ This inconsistency erodes predictability in civil proceedings and discourages litigants from relying on electronic evidence, fearing that the court might disregard it on procedural grounds. Furthermore, without codified procedures, even willing judges may find it difficult to admit electronic evidence without exposing their decisions to appeal on procedural irregularity grounds.

Supreme Court Regulation No. 7 of 2022 concerning Amendments to Supreme Court Regulation No. 1 of 2019 concerning Case Administration and Court Proceedings Electronically indicates that in order to accommodate developments, case administration and court proceedings can be carried out electronically by accessing the Electronic Court (E-Court) portal.²⁸

From case registration, document uploading consisting of the statement of claim, response, reply, rejoinder, list of evidence and conclusions, to the issuance of a ruling by the panel of judges, all filing is done on the E-Court portal.²⁹ When all stages have been completed electronically, there should be separate Supreme Court Regulation governing the mechanism for examining electronic evidence so that principals using electronic evidence are not disadvantaged simply because it is unclear when and who conducts digital forensic testing of electronic evidence.

The Supreme Court also issued Supreme Court Circular Letter No. 1 of 2014 concerning Amendments to Supreme Court Circular Letter No. 14 of 2010 concerning Electronic Documents as Supporting Documents for Cassation and Review Petitions. In this Circular Letter, the Chief Justice of the Supreme Court explains that every cassation and review petition must be accompanied by electronic documents to facilitate the technical process of submitting files to the Supreme Court.³⁰

While the Supreme Court has undertaken judicial training programs, the pace of technological change often outstrips the speed at which judicial capacity is updated. Many judges remain more comfortable with physical forms of evidence which they can examine using traditional legal reasoning tools. This lack of familiarity with information technology concepts—such as metadata analysis, blockchain verification, or data encryption—can lead to skepticism toward the reliability of electronic materials.³¹ As a result, judges may err on the side of caution, excluding potentially probative evidence simply because they are unable to evaluate its technical aspects.³²

Another factor that influences the difficulty of electronic evidence being accepted in court is the difference between conventional and electronic evidence. Conventional evidence, as referred to in Article 164 HIR/284 RBg, has been explained in expressive verbis as written evidence, witness testimony, presumption and confession. Therefore,

²⁷ Ontanu, Elena Alina. "Normalising the use of electronic evidence: Bringing technology use into a familiar normative path in civil procedure." *Oñati Socio-Legal Series* 12, no. 613-582 : (2022) 3.

²⁸ Muh. Chaezar Fachreza Harla, "Penerapan Aplikasi E-Court Dalam Persidangan Perkara Perdata Sebagai Wujud Peradilan Yang Sederhana, Cepat dan Biaya Ringan." *Jurnal Toelung – Jurnal Ilmu Hukum* 4, no. 8 (2024): 1-16

²⁹ Ni Kadek Anggun Indrayani, I Nyoman Lemes and I Gede Arya Wira Sena, "Efektivitas E-Court Terkait Administrasi Pendaftaran Perkara Perdata Dan Persidangan Secara Elektronik Dalam Memberikan Keadilan Bagi Masyarakat Di Pengadilan Negeri Singaraja Kelas I B." *Kertha Widya Jurnal Hukum* 11, no. 1 (2023): 24

³⁰ Zil Aidi, "Implementasi E-Court Dalam Mewujudkan Penyelesaian Perkara Perdata Yang Efektif Dan Efisien." *Masalah-Masalah Hukum* 49, no. 1 (2020): 80

³¹ Chan, Peter CH, and Antonio Cabral. "Digitization of judicial procedure: AI, ODR, blockchain and e-justice." *Comparative Civil Procedure* (444-418 : (2025).

³² Kodek, Georg E. "Modern communications and information technology and the taking of evidence." In *Electronic technology and civil procedure: New paths to justice from around the world*, pp. 261-278. Dordrecht: Springer Netherlands, 2012.

when a judge examines a witness's testimony, the judge should be able to assess whether the testimony is relevant or not, whether the testimony given is true to fact or whether there are any additions. Similarly, with other evidence, judges are accustomed to and able to assess conventional evidence in greater detail and with greater competence.³³

However, if the court is presented with electronic evidence that is susceptible to modification, addition or reduction in value, and the use of artificial intelligence, this means that electronic evidence cannot be treated in the same way as conventional evidence in general, which will have an impact on the acceptance of electronic evidence itself.³⁴

Courts often lack the necessary infrastructure, such as secure digital evidence management systems, forensic analysis tools, and trained IT staff who can assist judges in evaluating electronic materials.³⁵ Without these resources, even judges who are open to admitting electronic evidence may be constrained by the practical difficulties of verifying and safeguarding such materials during trial. This limitation meant that the panel of judges could not further consider vulnerable electronic evidence and perpetuates reliance on more traditional forms of proof.³⁶

There are court rulings that demonstrate how difficult it is to prove a case using electronic evidence in civil procedure law. One notable illustration is *Central Jakarta District Court Decision No. 451/Pdt.G/2018/PN.Jkt.Pst*. In this case, the plaintiff submitted a series of email correspondences as primary proof of contractual engagement with the defendant. However, the court ultimately rejected the evidentiary value of these emails on the grounds that they could not be conclusively attributed to the defendant without supporting evidence, such as sworn witness testimony or expert technical verification. The judgment emphasized that an email address, by itself, does not constitute irrefutable proof of authorship or consent, as access to the account could be obtained by unauthorized persons. Furthermore, the court underscored that the absence of metadata examination, IP address tracing, or digital forensic reports rendered the authenticity and origin of the emails uncertain. This reflects a judicial insistence on a higher evidentiary threshold for electronic communications, rooted in concerns over impersonation, unauthorized access, and the inherent mutability of digital data.

A similar reasoning can be found in *Medan District Court Decision No. 82/Pdt.G/2019/PN.Mdn*, where the dispute hinged partly on the content of WhatsApp chat logs allegedly exchanged between the parties. The plaintiff relied heavily on screenshots of the conversations, presenting them as proof of the defendant's acknowledgment of debt. However, the court dismissed these chat logs as insufficient proof, citing the relative ease with which instant messaging content can be edited, fabricated, or otherwise manipulated. The court noted that, without digital forensic examination to confirm message authenticity and chain of custody, such evidence could not be accorded the same weight as original physical documents or sworn testimony. This reasoning aligns with the judiciary's cautious stance toward digital platforms, particularly social media

³³ Mochamad Rusli Efendi, "Pemeriksaan Alat Bukti Elektronik Dalam Persidangan Peradilan Perdata Melalui E-Court." *Jurnal Hukum Bisnis Universitas Narotama Surabaya* 8, no. 3 (2024): 1389-1402

³⁴ Petty Febrian, M. Saleh, "Penerapan UU ITE Dalam Menilai Kedudukan dan Keabsahan Pembuktian Elektronik Pada Perkara Perdata." *Jurnal Hukum dan Kenotariatan* 5, no. 4 (2021): 541-549

³⁵ Dolova, M. O., and S. A. Sinitsyn. "Procedural Law and Scientific-Technical Progress: New Opportunities for Pre-Trial Electronic and Remote Interaction of the Parties." *Advances in Research on Russian Business and Management* 189-169 : (2022) 2022.

³⁶ Reiling 1, Dory. "Doing justice with information technology." *Information & Communications Technology Law* 15, no. 2 (2006): 189-200.

and messaging applications, where account hijacking, device sharing, and editing tools make verification complex.

Before handing down a verdict, the panel of judges must first hold deliberations. Deliberations are held to provide the basis and reasons for the panel of judges in handing down a verdict. These deliberations allow each judge examining the civil dispute to analyse whether the evidence presented by the principal and the evidence presented is relevant to the events submitted. These reasons can be found in the Legal Considerations section.³⁷ All matters relating to the lawsuit must be considered by the Panel of Judges, including the reasons why the evidence submitted by the parties was rejected.

Taken together, these cases demonstrate a consistent judicial pattern: electronic evidence in civil proceedings is often treated as secondary or supplementary rather than as standalone primary proof. The courts tend to require that such evidence be corroborated by more “traditional” forms of evidence—such as notarized documents, contemporaneous physical records, or credible witness statements—before granting it decisive weight.³⁸ In practice, this approach means that even technically reliable digital materials may be discounted unless accompanied by a strong evidentiary framework, including expert testimony and documented verification processes.

The implications of this approach are twofold. First, it reflects a deep-seated judicial preference for tangible, physical evidence as the gold standard in proof, consistent with the evidentiary regime under the *Herziene Indonesisch Reglement* (HIR) and *Rechtsreglement Buitengewesten* (RBg), both of which predate the advent of digital communication. Second, it exposes a legal-technical gap between the recognition of electronic documents under the *Electronic Information and Transactions Law* (ITE Law) and the actual procedural requirements for their admissibility in court³⁹. While the ITE Law provides for the legal equivalence of electronic documents to written documents, it does not harmonize with the procedural safeguards or authentication mechanisms required under the civil procedural framework.⁴⁰

This gap creates a paradox: electronic evidence is legally recognized yet procedurally vulnerable. In both cited decisions, the courts did not deny the theoretical admissibility of electronic evidence; instead, they questioned its probative value due to deficiencies in verification and linkage to the alleged author. The result is a de facto evidentiary hierarchy in which electronic materials, despite being legally valid, remain dependent on supplementary traditional evidence for judicial acceptance.⁴¹

From a comparative perspective, the cautious stance of Indonesian courts mirrors the early judicial attitudes in other jurisdictions prior to the institutionalization of digital forensic standards. In countries with more mature e-discovery regimes, procedural rules now mandate detailed protocols for data extraction, preservation, and presentation, thereby increasing judicial confidence. In Indonesia, however, the absence of codified

³⁷ Riduan Syahrani, *Sistem Peradilan dan Hukum Acara Perdata di Indonesia*, Banjarmasin: Citra Aditya Bakti, 2016, p. 1-372

³⁸ Татулич, Ирина. “Electronic evidence as a means of evidence in civil proceedings.” *Law Review of Kyiv University of Law* 219-215 : (2020) 1.

³⁹ Alfred, Alfred Yetno, and Ni Made Anggi Arlina Putri. “The Use of Electronic Evidence In Civil Jurisdiction Processes in Indonesian Law Courts.” *International Proceeding on Religion, Culture, Law, Education, And Hindu Studies* 170-157 : (2022) 1.

⁴⁰ Siddiqi, Muzammil, and Ilyas Ilyas. “The Implementation of Electronic Evidence Presentation in Civil Proceedings.” *Genesis Law and Social Sciences* 1, no. 15-10 : (2025) 1.

⁴¹ Dewi, Ni Komang Novi Priastuti Puspita, Erikson Sihotang, and Komang Edy Dharma Saputra. “Implementation of Electronic Evidence in Civil Trials at the Denpasar District Court.” *Journal of Law, Social Science and Humanities* 3, no. 1 (2025): 61-69.

standards leaves authentication to the discretion of individual judges, leading to variability in outcomes and reinforcing a conservative evidentiary culture.⁴²

The reluctance to admit electronic evidence is also influenced by the adversarial nature of Indonesian civil procedure. Since judges primarily assess evidence presented by the parties without initiating their own investigation, any doubt cast on the credibility of the evidence—no matter how minor—can be decisive. In situations where one party challenges the authenticity of electronic evidence, the burden shifts heavily onto the submitting party to establish its reliability. Given the absence of standardized methods for meeting this burden, many litigants are unable to satisfy judicial scrutiny, leading to exclusion of the evidence.⁴³

Moreover, there is a psychological dimension to judicial skepticism. Some judges perceive electronic evidence as inherently less tangible and therefore less trustworthy than physical documents or oral testimony. This perception is reinforced by media reports of digital fraud, hacking incidents, and data breaches, which amplify fears about the manipulability of electronic records. Until these perceptions are addressed through both legal reform and judicial education, electronic evidence will continue to face an uphill battle for acceptance in Indonesian civil courts.⁴⁴

The recognition of electronic evidence within the Indonesian legal system, as stipulated in Article 5 of the ITE Law, represents a fundamental shift in evidentiary rules. It affirms that electronic information and documents may serve as valid legal evidence equivalent to conventional written documents. Nonetheless, their admissibility is contingent upon the fulfillment of both formal and material requirements. The formal requirements relate to the procedural and structural validity of electronic documents, while the material requirements address the substantive truth, authenticity, and relevance of the evidence presented in court.⁴⁵

One of the most critical formal requirements is the presence of a valid electronic signature, as regulated under Article 11 of the ITE Law. An electronic signature serves to authenticate the identity of the parties and to safeguard the integrity of the document. Its validity hinges on compliance with principles of authentication and integrity, often verified through certification issued by an accredited Certification Authority (CA)⁴⁶. Without such a safeguard, courts are likely to question the authenticity and reliability of the evidence.

In addition to electronic signatures, another formal requirement lies in the accessibility and retrievability of electronic information. Article 6 of the ITE Law mandates that electronic information is deemed valid so long as it can be accessed, displayed, and guaranteed for integrity in a comprehensible format. This requirement ensures that electronic evidence is not merely stored but can be meaningfully examined and relied

⁴² Nugroho, Dedy Muchti. "The Existence of Electronic Evidence in Verification Law System in Indonesia from the Judge's Perspective." *PROCEEDING ICTESS (Internasional Conference on Technology, Education and Social Sciences)*. 2017.

⁴³ Amarini, Indriati, Yusuf Saefudin, Ika Ariani Kartini, Marsitningsih Marsitningsih, and Noorfajri Ismail. "Digital transformation: creating an effective and efficient court in Indonesia." *Legality: Jurnal Ilmiah Hukum* 31, no. 284-266 : (2023) 2.

⁴⁴ Nathanael E. J Sumampouw and Fathul Lubabin Nuqul, "Aspek Psikologis Hakim dan Putusan Hakim: Tinjauan Psikologi Forensik," in *Bunga Rampai: Memotret Pertimbangan Putusan Hakim Dari Berbagai Perspektif*, ed. Festy Rahma Hidayati (Sekretariat Jenderal Komisi Yudisial Republik Indonesia, 2024), https://www.komisiyudisial.go.id/storage/assets/uploads/files/aGKnO6sj_Bunga%20Rampai%20isi%20All%20small.pdf#page=95.

⁴⁵ Kurniawan, M. Beni. "Implementation of electronic trial (e-litigation) on the civil cases in Indonesia court as a legal renewal of civil procedural law." *Jurnal Hukum dan Peradilan* 9, no. 70-43 : (2020) 1.

⁴⁶ Sukmasari, Amelia, Wulanmas Frederik, Merry Elisabeth Kalalo, and Muhammad Herro Soepeno. "Application Of Electronic Evidence as Extension of Legal Civil Evidence Divorce Cases in Indonesia." *International Journal of Law, Environment, and Natural Resources* 4, no. 14-1 : (2024) 1.

upon during judicial proceedings⁴⁷. Accessibility therefore constitutes a fundamental dimension of evidentiary validity.

A further formal element concerns the secure preservation and management of electronic data. Article 16 of the ITE Law obliges electronic system providers to maintain data securely, protect it against unauthorized access, and preserve confidentiality as well as integrity. Improper storage or weak protection measures can jeopardize the admissibility of evidence by creating doubts about whether the data has been tampered with. Consequently, chain of custody and secure storage protocols become indispensable components of the evidentiary process⁴⁸.

Turning to the material requirements, the first key aspect is the relevance of electronic evidence to the substantive dispute. For electronic documents to hold probative value, they must directly support or refute the claims of the parties. Even if an electronic document meets all formal requirements, its evidentiary weight diminishes significantly if it is not closely tied to the facts in issue. Material validity thus safeguards against irrelevant or marginal electronic records being treated as decisive proof⁴⁹.

Another material requirement is the authenticity and integrity of the content. Courts must be assured that the electronic data presented reflects the original facts without modification. To this end, technical methods such as hash verification, metadata analysis, or digital forensic auditing can be employed to demonstrate that the document has remained unchanged since its creation. Without such guarantees, judges are often hesitant to afford electronic evidence decisive weight.

Equally important is the requirement of attribution, which demands a clear link between the electronic document and the parties to the dispute. For example, emails, chat logs, or digital contracts must be traceable to specific individuals or entities through identifiable electronic addresses or accounts. Without such traceability, courts may dismiss the evidence as inconclusive, since the involvement of the defendant or claimant cannot be sufficiently established.

In practice, challenges often arise in fulfilling these requirements. For instance, WhatsApp messages may formally meet accessibility and storage standards but fail materially if they cannot be authenticated through forensic analysis or linked conclusively to the parties' devices. This explains why Indonesian judges frequently reject electronic evidence, citing the absence of supporting technical verification or corroborating testimony, despite the normative recognition granted by the ITE Law⁵⁰.

The divergence between statutory recognition under the ITE Law and judicial practice underscores a persistent legal gap. Although the ITE Law provides a progressive framework, its provisions have not been fully harmonized with Indonesia's Civil Procedure Code (HIR/RBg), which still reflects a conventional approach to documentary evidence. Legal certainty relates to whether a legal rule is applicable or not⁵¹. As a result, electronic evidence is often regarded as secondary or supplementary, rather than as primary proof, thereby limiting its practical effectiveness in civil litigation.

⁴⁷ Gunarto, G., Y. Yusri, and S. Kusriyah. "Reconstruction of Evidence Regulations in Civil Jurisdiction Based on Justice Value." *Scholars International Journal of Law, Crime and Justice* 6, no. 452-447 : (2023) 08.

⁴⁸ Setyawan, Vincentius. "The Problems of Proving Electronic Evidence." *Fundamental: Jurnal Ilmiah Hukum* 11, no. 88-73 : (2022) 1.

⁴⁹ Khusniyah, Nurul Khotimatul, and Widayati Widayati. "Implementation of Signature Validity On Electronic Documents in Proof Indonesian Civil Procedure Law." *Law Development Journal* 3, no. 773-767 :4.

⁵⁰ Sarwadi, Gatot. "The Urgency of Electronic Evidence Validation by Judges in Digital Forensic Examinations." *Ratio Legis Journal* 3, no. 1151-1142 :1.

⁵¹ Sri Lestari, "The Legal Certainty for Resolving Consumer and Business Actor Disputes from the Perspective of Social Engineering Justice from Roscoe Pound," *Jurnal IUS Kajian Hukum dan Keadilan* 11, no. 3 (2023): 557-68, <https://doi.org/10.29303/ius.v11i3.1309>.

2.2. Implications of Rejecting Electronic Evidence on Case Process and Outcomes

In the practice of civil dispute resolution in court, particularly during the examination of evidence, the panel of judges will ask the parties to submit a list of evidence so that the panel of judges knows what evidence will be presented by the parties. The list of evidence may be accompanied by an explanation of the relevance of the evidence to the legal case. The judges will then review and examine each piece of evidence submitted by the parties in accordance with the list that has been submitted.

Before the court can proceed to substantive issues, it must first resolve challenges regarding whether such evidence can be considered valid. This frequently consumes valuable court time, as parties present expert witnesses, raise procedural objections, or request technical verification of the evidence. Such procedural hurdles stand in sharp contrast to the need for efficient, timely, and effective dispute resolution⁵².

For that reason, parties with otherwise strong legal positions may find themselves disadvantaged. A claim or defense that is substantively well-founded may be dismissed simply because the electronic evidence submitted fails to meet the high threshold of authentication demanded by the court. This scenario raises concerns over substantive justice, as overly formalistic evidentiary requirements may override the pursuit of formal truth, producing outcomes that undermine fairness even when the law, on its face, supports the aggrieved party.⁵³

One concrete example of the losses caused by the rejection of electronic evidence is High Court Decision Number: 147/PDT/2019/PT PDG, in which the panel of judges in the first instance did not consider the electronic evidence submitted by the plaintiff, but in the appeal, the panel of judges stated that the electronic evidence submitted by the plaintiff had legal force, even if only as preliminary evidence.

The core of this problem lies in the judiciary's high evidentiary threshold, which demands extensive verification before electronic evidence can be admitted. Courts often insist on corroborating testimony, expert validation, or technical certification to ensure authenticity and integrity. While such caution reflects a legitimate concern over the malleability of digital data, it risks creating an environment where access to justice is contingent upon technological resources that not all litigants possess⁵⁴.

Consequently, disputes that hinge on digital transactions or communications—now ubiquitous in commercial and civil life—face disproportionate vulnerability. A party relying on email exchanges, chat logs, or electronic contracts may find their case substantially weakened if the evidence is deemed inadmissible due to insufficient authentication. In this way, judicial doubts about electronic evidence have a material impact on the distribution of justice in the civil arena.⁵⁵

The insistence on stringent verification also reflects a deeper tension between formalism and substantive justice. Formalistic approaches prioritize procedural compliance above factual accuracy, thereby allowing technical deficiencies to eclipse the pursuit of truth. This misalignment challenges the principle that civil procedure

⁵² Gronic, Irina A. "On some aspects of case management in electronic courts of Indonesia." In *New Technology for Inclusive and Sustainable Growth: Technological Support, Standards and Commercial Turnover*, pp. 193-199. Singapore: Springer Singapore, 2022.

⁵³ Scoot M Giordano, "Electronic Evidence and the Law." *Information System Frontiers* 6, no. 3 (2004): 161-174

⁵⁴ Agus, Azwir. "Embodiment Principles of Clearing Justice in Consumer Arbitration." *Hasanuddin Law Review* 4, no. 388-383 : (2018) 3.

⁵⁵ Ahmad Habib Alfikry, Muhammad Riyan Afandi, dan Dian Latifiani, "National Law Development through Civil Procedure Law Reform as a Manifestation of State Goals during the Covid-19 Pandemic," *Lex Scientia Law Review* 5, no. 2 (2021): 41–64, <https://doi.org/10.15294/lesrev.v5i2.50483>.

should function as a means to achieve material justice, rather than as an obstacle to its realization.

From a broader perspective, this judicial stance risks undermining the credibility of civil adjudication. If litigants perceive that courts are unable or unwilling to engage effectively with electronic evidence, they may lose confidence in the judiciary's capacity to resolve disputes fairly in a digital era. Such perceptions erode public trust, which is foundational to the legitimacy of the justice system.

Equally significant is the contradiction this practice poses to Article 2(4) of Indonesia's Judiciary Law, which mandates that justice be administered in a simple, fast, and low-cost manner. Prolonged disputes over the admissibility of electronic evidence inevitably delay proceedings, increase litigation costs, and complicate case management. These delays contradict the legislative intent of procedural efficiency and highlight a systemic inconsistency in the administration of civil justice⁵⁶.

Moreover, the exclusion of electronic evidence disproportionately affects parties with limited resources. Wealthier litigants can afford expert witnesses or sophisticated forensic services to authenticate digital data, whereas financially weaker parties often cannot. This disparity creates an uneven playing field in which access to justice is stratified along economic lines, contradicting the principle of equality before the law.⁵⁷

In practical terms, the rejection of electronic evidence also hinders the use of digital communication and agreements. Companies and individuals may be reluctant to rely on electronic documents if they are concerned that such records will not be recognised as valid evidence in court. This undermines Indonesia's broader commitment to digital transformation and economic modernisation within the framework of Industry 4.0.⁵⁸

At a normative level, these practices call into question the judiciary's alignment with contemporary realities of civil and commercial life. As societies become increasingly digitized, insisting on traditional forms of proof risks rendering the law out of step with social and economic developments. This disconnect threatens the relevance of the legal system itself, as litigants turn to alternative mechanisms of dispute resolution that appear more technologically adaptive⁵⁹.

This judicial attitude also runs counter to the principle of simple, fast, and low-cost justice enshrined in Article 2(4) of the Indonesian Judiciary Law (Law No. 48 of 2009). When judges insist on additional forms of corroboration such as forensic digital verification or supporting physical documents the financial burden of litigation rises significantly. Parties with limited economic resources are disproportionately disadvantaged, unable to meet what the court perceives as an adequate evidentiary standard. This directly hinders equal access to justice⁶⁰.

This judicial attitude stands in sharp contradiction to the principle of simple, fast, and low-cost justice as articulated in Article 2(4) of the Indonesian Judiciary Law (Law No.

⁵⁶ Aime, Andrianantenaina Fanirintsoa, and Zulfikar Dori Ad'ha. "Determination Of Legal Remedies for Civil Cases to Make the Principles of Justice Simple, Fast and Lighting Cost." *Jurnal Justisia: Jurnal Ilmu Hukum, Perundang-Undangan dan Pranata Sosial* 6, no. 9-1 :(2021) 1.

⁵⁷ Djamaludin et al., "Assessing the Impact of Electronic Court Systems on the Efficiency of Judicial Processes in the Era of Digital Transformation," *Volksgeist: Jurnal Ilmu Hukum dan Konstitusi* 6, no. 1 (27 Juni 2023): 1–18, <https://doi.org/10.24090/volksgeist.v6i1.8082>.

⁵⁸ Nurfauzah Maulidiyah dan Yustria Novi Satriana, "Eksistensi Digital Evidence dalam Hukum Acara Perdata," *Jurnal Cakrawala Hukum* 10, no. 1 (30 Juli 2019), <https://doi.org/10.26905/idjch.v10i1.2616>.

⁵⁹ Hidayat, Imam, Abdul Rachmad Budiono, Budi Santoso, and Rachmi Sulistyarini. "Preparatory Examination in Civil Procedure Law: Strategies for Swift and Efficient Justice." *Indonesia Law Reform Journal* 4, no. :(2024) 2 198-171.

⁶⁰ Latifiani, Dian, Yusriyadi Yusriyadi, Agus Saroni, Esmi Warassih Pudjirahayu, Suryo Adi Widigdo, and Nur Arif Nugraha. "Implementation of Simple, Fast and Low-Cost Principles in E-Summons with the E-Court System." *Diponegoro Law Review* 8, no. 123-107 :(2023) 1.

48 of 2009). The provision was designed to ensure that procedural mechanisms facilitate, rather than obstruct, the resolution of disputes. However, when courts adopt a rigid stance that requires extensive corroboration—such as digital forensic authentication, expert testimony, or the submission of additional physical documents—the procedural burden shifts heavily onto litigants. Instead of streamlining adjudication, the insistence on excessive verification creates procedural bottlenecks, thereby undermining the legislative intent behind the principle.⁶¹

The principle of simplicity provides the view that in examining a dispute, the examination must be carried out efficiently and effectively. The principle of speed is universal in nature and relates to the time taken to resolve disputes in court. This is a manifestation of the practice of civil dispute resolution in court, which used to take a considerable amount of time. The principle of low costs means that the costs arising from a dispute should be affordable for the public.⁶²

The examination of electronic evidence cannot be equated with the examination of conventional evidence in general. Electronic evidence cannot be examined in a simplistic manner to save time and energy. Furthermore, the examination of electronic evidence cannot be carried out quickly if digital forensic testing is performed, as it will take time depending on the type of electronic evidence used and the principle of low cost only within the scope of case registration fees, because digital forensic testing must be carried out independently and the costs incurred will certainly be quite burdensome for the parties, especially considering that in some legal considerations, the panel of judges requests the presence of experts in the field of digital forensics.⁶³

The financial implications of this judicial practice are particularly severe. Litigation is already costly in terms of filing fees, attorney expenses, and the time invested in navigating procedural complexities. The additional requirement of technical authentication of electronic evidence introduces further costs, including the hiring of digital forensic experts or the acquisition of certified verification tools. For economically weaker litigants, these costs may prove prohibitive, effectively pricing them out of the judicial process. This exacerbates socio-economic inequality by allowing only wealthier parties to marshal the resources necessary to satisfy evidentiary thresholds, while less affluent litigants are left unable to fully substantiate their claims or defenses.⁶⁴

The disproportionate impact on vulnerable litigants also raises concerns regarding equal access to justice, a core component of the rule of law. If evidentiary standards are applied in a way that systematically disadvantages parties with limited financial capacity, then the courts risk perpetuating structural injustice under the guise of procedural rigor. In such circumstances, the pursuit of formal procedural certainty undermines substantive justice, as the truth of a claim may be overshadowed by an inability to comply with costly evidentiary demands. This judicial practice, therefore, not only contravenes statutory principles but also undermines broader constitutional guarantees of equality before the law.

The absence of standardized procedures for the collection, preservation, and presentation of electronic evidence exacerbates the problem. Neither the Indonesian Civil

⁶¹ Latifiani, Dian, and Mitha Ratnasari. "The Small Claim Court to Realize the Fast and Simple Principle in Civil Disputes Resolution." *South East Asia Journal of Contemporary Business, Economics and Law* 18, no. 12-7 : (2019) 4.

⁶² Eman Suparman, "Verplichte Procureurstelling Untuk Peradilan Yang Sederhana, Cepat, Dan Biaya Ringan," *Veritas et Justitia* 5, no. 1 (2019): 80–104, <https://doi.org/10.25123/vej.3288>.

⁶³ Wilfridus Handaya Triadi Bambang et al., *Forensik Digital Dasar* (Yogyakarta: Graha Ilmu, 2024).

⁶⁴ Sari, Dessi Perdani Yuris Puspita, Handityo Basworo, and Haedah Faradz. "Implementation of Principles is Simple, Fast and Low Cost in the Banyumas District Court Class II." In *3rd International Conference on Law, Governance, and Social Justice (ICoLGaS 2023)*, pp. 800-812. Atlantis Press, 2023.

Procedure Code (HIR) nor the RBg provides detailed provisions on these matters, leaving admissibility largely to judicial discretion. This reliance on subjective interpretation creates the risk of *forum shopping*, where litigants choose court they believe to be more favorable toward electronic evidence in order to enhance their chances of success.

From a normative perspective, judicial skepticism indirectly undermines the effectiveness of Article 5(1) of the Electronic Information and Transactions Law (UU ITE), which explicitly recognizes the legal force of electronic documents. Without procedural mechanisms to ensure consistent application, such recognition remains largely declaratory, with limited practical impact in civil litigation. This gap between substantive and procedural law represents a *normative gap* that impedes the enforcement of rights already guaranteed under statute⁶⁵.

From a normative perspective, judicial rejection toward electronic evidence creates a fundamental tension between substantive recognition and procedural application. Article 5(1) of the Electronic Information and Transactions Law (UU ITE) explicitly affirms that electronic documents possess the same legal force and effect as conventional written documents. In theory, this provision represents a progressive acknowledgment of technological developments and their role in modern legal relations. However, the absence of detailed procedural rules governing the collection, verification, and presentation of such evidence significantly limits its practical utility in civil litigation⁶⁶. Judges often hesitate to admit electronic documents as primary evidence, not because the statute denies their validity, but because the procedural infrastructure to operationalize this recognition remains underdeveloped.

On the one hand, the provisions regarding the recognition of electronic information and/or electronic documents as electronic evidence have been clearly stipulated in the form of legislation, even though they are outside the provisions of civil procedural law. However, all parties involved in the court proceedings, including the parties themselves, must believe that electronic evidence is valid evidence. However, there are currently no technical rules on how the panel of judges should respond to, assess and ascertain that the evidence submitted⁶⁷ is indeed electronic evidence that has been obtained legally, is acceptable, authentic and has been verified for accuracy.

This condition demonstrates the existence of a normative gap—namely, the disjunction between substantive and procedural law⁶⁸. While substantive law has already extended recognition to electronic documents as legitimate evidence, procedural law, embodied in the Indonesian Civil Procedure Code (HIR/RBg), has not yet been harmonized with these developments. The result is that litigants who rely on electronic documents to substantiate their claims may find themselves disadvantaged, as courts demand corroboration through traditional forms of evidence such as witness testimony or notarized documents. Consequently, the promise of Article 5(1) UU ITE becomes largely declaratory, serving more as a symbolic recognition of technological change than as a practical instrument of justice.

This normative gap also raises broader questions regarding the enforceability of rights in the digital era. If the legal system acknowledges the validity of electronic documents

⁶⁵ Haspada, Deny, and Efa Laela Fakhriah. "The Development of Evidence Law in Civil Cases Towards the Unification of Civil Procedural Law." *Yuridika* 35, no. 31 : (2020) 1.

⁶⁶ Siddiqi, Muzammil, and Ilyas Ilyas. "The Implementation of Electronic Evidence Presentation in Civil Proceedings." *Genesis Law and Social Sciences* 1, no. 15-10 : (2025) 1.

⁶⁷ Bambang Sutyoso, "Ruang Lingkup dan Aspek-aspek Kebijakari Pembaharuan Hukum Acara Perdata di Indonesia," *Jurnal Hukum IUS QUIA IUSTUM* 19, no. 20 (2002): 1–17, <https://doi.org/10.20885/iustum.vol9.iss20.art1>.

⁶⁸ Santosa, Dewa Gede Giri, and Karell Mawla Ibnu Kamali. "Acquisition and Presentation of Digital Evidence in Criminal Trial in Indonesia." *Jurnal Hukum dan Peradilan* 11, no. 218-195 : (2022) 2.

in principle but fails to provide consistent procedural mechanisms for their use in practice, then individuals and corporations alike may be deprived of effective remedies. The principle of legal certainty is thus compromised, as litigants cannot reliably predict whether their electronic evidence will be admitted or disregarded.

2.3. Formulation for Admitting on Electronic Evidence

Judicial rejection toward electronic evidence in Indonesia largely arises from a fragmented and inconsistent legal framework. While the Electronic Information and Transactions Law (ITE Law) formally recognizes the validity of digital documents, the Civil Procedure Code remains silent on the procedural mechanisms for their admission and evaluation. Supreme Court Regulations (PERMA) on e-Court, although progressive in enabling online submissions, focus primarily on administrative aspects rather than substantive evidentiary rules. This misalignment creates procedural ambiguity, leaving judges to rely on conservative interpretations that often privilege paper-based evidence over digital formats⁶⁹.

There are two opposing sides to the regulation of electronic evidence. Apart from HIR and RBg, which are products of colonialism that strictly regulate procedural law in a conventional manner, changing civil procedural law is not an easy task as it requires time and comprehensive feasibility studies.⁷⁰ On the other hand, if it is not regulated, the law will lag behind developments in society, which is unacceptable. Therefore, to fill this gap, regulations have been created that add procedural provisions outside of HIR and RBg, such as the Judicial Authority Law, the Supreme Court, Supreme Court Regulations and Supreme Court Circulars. Therefore, the Supreme Court, observing the prevalence of electronic evidence being rejected in civil dispute resolutions, should make a breakthrough in the form of a Supreme Court Regulation (PERMA) to establish a body or division in each court whose sole function is to verify the electronic evidence used by the parties.

Alignment should not be limited to mere cross-references between laws but should integrate definitions, evidentiary thresholds, and standardized verification procedures. To expressly regulate the collection, preservation, authentication, and presentation of electronic evidence would provide clear procedural guidance.⁷¹ Such provisions could include technical requirements for metadata preservation, chain-of-custody protocols, and hash verification, ensuring that digital submissions meet a uniform admissibility standard.

An effective legal framework for electronic evidence must incorporate clear and measurable technical standards, particularly those concerning metadata preservation, chain-of-custody protocols, and hash verification mechanisms. These elements constitute the essential foundation for ensuring the authenticity and integrity of digital evidence in judicial proceedings. Metadata provides crucial contextual information—such as origin, creation time, and subsequent modifications—without which electronic evidence loses both its evidentiary reliability and its capacity to represent factual events accurately.⁷²

⁶⁹ Zulaeha, Mulyani. "E-Courts in Indonesia: Exploring the opportunities and challenges for justice and advancement to judicial efficiency." *International Journal of Criminal Justice Sciences* 18, no. 194-183 : (2023) 1.

⁷⁰ Bambang Sutiyoso, "Ruang Lingkup dan Aspek-Aspek Kebijakan Pembaharuan Hukum Acara Perdata di Indonesia." *Jurnal Hukum Ius Quia Iustum* 9, no. 20, (2002): 1-17

⁷¹ Setyowati, Retno Kus. "The Conclusive Phase of Civil Case Resolution: Examining Execution and Post-Decision Challenges in Indonesian Civil Procedural Law." *Unnes Law Journal* 9, no. 332-311 : (2023) 2.

⁷² Alex Biedermann, Kyriakos N. Kotsoglou, "Digital Evidence Exceptionalism? A Review and Discussion of Conceptual Hurdles in Digital Evidence Transformation." *Forensic Science International: Synergy* 2, no. 1 (2020): 262-274

Similarly, a robust chain-of-custody protocol is indispensable for safeguarding digital evidence from alteration throughout its collection, storage, and presentation. The absence of such a standardized procedure in Indonesian civil litigation significantly heightens the risk of evidentiary challenges, as any procedural irregularity may be invoked to question the legitimacy of the submitted data. Hash verification adds an additional layer of technical certainty by offering a cryptographic method to confirm that the evidence presented in court is identical to the original dataset, thus allowing integrity assessments that are objective and scientifically verifiable.⁷³ Without institutionalizing these technical standards at a national level, inconsistencies in judicial practice will persist, perpetuating legal uncertainty and leaving substantial room for subjective judicial interpretation. Such disparities highlight a deeper normative gap: although substantive law recognizes the legal validity of electronic evidence, the absence of concrete procedural mechanisms undermines its practical enforceability. This misalignment between substantive recognition and procedural implementation ultimately weakens the effectiveness of electronic evidence within Indonesia's civil justice system.

Nonetheless, legal reform alone will not fully address the underlying challenges without concurrent judicial capacity building. Judges are the ultimate arbiters of admissibility, and their confidence in digital evidence depends on a robust understanding of its technical underpinnings. Currently, limited exposure to digital forensics and information technology contributes to judicial caution or outright rejection of electronic submissions. This knowledge gap can only be addressed through sustained training initiatives that blend legal analysis with practical technological skills⁷⁴.

The presence of digital forensic experts in civil litigation is increasingly regarded as an essential instrument to bridge the gap between technological complexity and the limited legal and technical knowledge of judges. Expert testimony provides objective clarification on issues such as data authentication, document integrity, and the reconstruction of digital traces. In this sense, the role of experts becomes crucial to ensure that electronic evidence is evaluated accurately, objectively, and in accordance with the rapid developments in information technology⁷⁵.

Nevertheless, the engagement of digital forensic experts cannot be separated from its significant financial implications. Expert services typically involve considerable professional fees, which are generally borne by the party that requests them, whether plaintiff or defendant⁷⁶. This raises both juridical and practical concerns, as it directly conflicts with the principle of low-cost litigation enshrined in Article 2(4) of the Indonesian Judiciary Law. This principle mandates that every individual should have access to justice without excessive financial burdens. The obligation to finance expert testimony may therefore create disparities in access to justice, disproportionately disadvantaging parties with limited economic resources.⁷⁷

This reality highlights the necessity for a more adaptive legal policy framework that balances the need for expert involvement with the principle of affordability in litigation.

⁷³ Auqib Hamid Lone, "Forensic-chain: Blockchain based digital forensics chain of custody with PoC in Hyperledger Composer," *Digital Investigation* 28, no. 2 (2019): 44-45

⁷⁴ Losari, Junianto James. "Geography has little impact: a comparative study on the role of judges in Singapore and Indonesia in the taking of evidence in civil proceedings." *Asia Pacific Law Review* 32, no. 212-190 : (2024) 1.

⁷⁵ Azizan, Akmal, Sally Sophia, Salma Zahra, and Nurajam Perai. "Optimizing Civil Construction Litigation In Indonesia: A Comprehensive Framework for Efficiency, Expertise, And Equity In Dispute Resolution." *Jurnal Hukum dan Peradilan* 13, no. 226-189 : (2024) 1.

⁷⁶ Jayadi, Hendri. "Kekuatan Pembuktian Keterangan Ahli Berdasarkan Hukum Acara Perdata Indonesia." *AL-MANHAJ: Jurnal Hukum Dan Pranata Sosial Islam* 5, no. 1822-1815 : (2023) 2.

⁷⁷ Eman Suparman, "Doktrin Penyelesaian Sengketa Perdata: Analisis dan Perkembangan Dewasa ini di Indonesia," *Borneo Law Review* 2, no. 1 (2018): 37-58, <https://doi.org/https://doi.org/10.35334/bolrev.v2i1.719>.

For instance, the state could establish an official roster of certified digital forensic experts whose services are partially subsidized, or courts could facilitate the appointment of independent experts at proportionate costs. Such measures would enable the judiciary to benefit from expert knowledge while avoiding undue financial burdens on the parties.

A comprehensive national protocol would serve as a definitive reference point for all parties engaged in the evidentiary process. This protocol should be formulated through a collaborative approach involving legal practitioners, digital forensic specialists, technology regulators, academic experts, and representatives from the judiciary. By incorporating multidisciplinary perspectives, the standards would strike a balance between legal requirements, technological feasibility, and practical applicability in courtroom settings. Moreover, these standards should be enshrined in binding regulations—either as a dedicated statute or as part of amendments to the Civil Procedure Code—to ensure nationwide enforcement rather than leaving compliance to voluntary practice⁷⁸.

The content of such a protocol should be both detailed and adaptable. At a minimum, it should outline best practices for every stage of handling electronic evidence: identification, acquisition, preservation, examination, documentation, and presentation in court. In the identification and acquisition stages, protocols could require the use of forensic imaging tools to create exact replicas of digital files, ensuring the original data remains unaltered. During preservation, hash algorithms such as SHA-256 could be mandated to generate digital fingerprints, which serve as verification of data integrity. For the examination stage, standardized forensic software and procedures should be specified to reduce variability in expert analysis.

Chain of custody procedures would be a critical component of the standards. Every transfer or access to electronic evidence should be meticulously documented, including the identity of the handler, date and time of access, purpose of handling, and verification of hash values before and after transfer. This level of documentation would significantly reduce allegations of tampering and provide judges with a transparent record of the evidence's journey from collection to courtroom presentation. Such measures mirror practices in advanced jurisdictions like the United States and Singapore, where chain-of-custody documentation is central to the admissibility of digital proof⁷⁹.

Uniformity across jurisdictions is another key advantage of national standards. Currently, differences in local court practices can result in similar pieces of evidence being admitted in one court but rejected in another, creating legal uncertainty and potentially unjust outcomes. By enforcing a single, nationwide protocol, litigants would have clear expectations regarding the requirements for admissibility, and judges would be guided by the same evidentiary benchmarks regardless of geographic location. This would greatly reduce procedural disputes and align evidentiary practices with the principle of equal treatment before the law.

Beyond litigation, national standards would also have preventive and educational benefits⁸⁰. By setting clear rules, businesses, government agencies, and individuals would have a better understanding of how to manage and preserve digital records in a legally compliant manner. This could encourage better record-keeping practices, reduce the

⁷⁸ Setiawan, Hafizh Daffa, Mohammed Erhuma, and Amarru Muftie Holish. "E-Court Paradigm Shift: Problems of Legitimacy Mechanisms of Electronic Evidence in State Administrative Procedure Law." *Indonesian State Law Review* 6, no. 1 (2023): 53-74.

⁷⁹ Gopalan, S. Harihara, S. Akila Suba, C. Ashmithashree, A. Gayathri, and V. Jebin Andrews. "Digital forensics using blockchain." *International Journal of Recent Technology and Engineering* 8, no. 184-182 : (2019) 2.

⁸⁰ Latifiani, Dian, Baidhowi Baidhowi, Pratama Herry Herlambang, Farkhan Radyafani Winarno, and Ahmad Habiburrahman. "Can Advocates' Legal Culture in Civil Law Enforcement Drive Reform in Indonesia's Modern Justice System?." *Journal of Law and Legal Reform* 5, no. 942-913 : (2024) 3.

risk of unintentional spoliation of evidence, and ultimately improve the overall quality of digital submissions to the courts. Furthermore, the adoption of these standards could be supported by capacity-building initiatives, ensuring that legal professionals and law enforcement are fully equipped to implement them effectively.

Comparative learning also highlights the importance of judicial culture in the acceptance of technological innovations. In jurisdictions where courts have actively embraced electronic evidence, reforms were not solely driven by legislative change but were accompanied by a gradual shift in judicial attitudes. In Indonesia, fostering such a shift will require continuous dialogue between the judiciary, legal academics, and technology experts, ensuring that skepticism is replaced with informed critical evaluation.

3. CONCLUSION

The recognition of electronic information and/or electronic documents and/or their printouts as valid evidence is a step forward in procedural law, particularly civil procedure. Although this has been regulated, there are still many court decisions that reject electronic evidence because no digital forensic examination has been carried out, and the parties do not know exactly when, where and to whom to conduct a digital forensic examination because it is not regulated at all. Therefore, the author suggests that in order to prevent the continued rejection of electronic evidence on the grounds that digital forensic testing has not been conducted, the Supreme Court should collaborate with the Police Forensic Laboratory Centre and issue a Supreme Court Regulation that essentially establishes a special body that can test the authenticity of electronic evidence, not only in civil cases, in order to provide legal certainty to the parties.

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